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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/698,341	10/27/2000	Joseph A. Sorge	25436/1560	6038

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EXAMINER

HUTSON, RICHARD G

ART UNIT	PAPER NUMBER
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1652

DATE MAILED: 11/01/2002

17

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application N .

09/698,341

Applicant(s)

SORGE ET AL.

Examiner

Richard G Hutson

Art Unit

1652

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 09 October 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY [check either a) or b)]**

- a) ☒ The period for reply expires 5 months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: See Continuation Sheet.

3. ☒ Applicant's reply has overcome the following rejection(s): See Continuation Sheet.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: 1-3,5,46 and 47.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 6-45 and 85-88.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The proposed drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_
10. ☐ Other: \_\_\_\_\_

  
RICHARD HUTSON, PH.D.  
PATENT EXAMINER

Continuation of 2. NOTE:

Applicants proposed amendment of claims 10 and 88 would require a new search as the amendment to the claims places further limitations on the claimed polymerases that were not previously searched.

Continuation of 3. Applicant's reply has overcome the following rejection(s):

Applicant continues to argue the previous objection to the specification that the recitation on page 23, line 5, "...the conventional deoxynucleotides dATP, dCTP, dGTP and TTP...", is unclear in its reference to TTP as being included as a deoxynucleotide. Applicants arguments presented in previous papers, as well as the present after-final response are NOT persuasive, as the examiner continues to believe that "dTTP" is the proper abbreviation for deoxythymidine triphosphate, and not "dideoxythymidine triphosphate" as asserted by applicants, and "TTP" is a proper abbreviation for thymidine triphosphate. In light of applicants continued insistence that "the abbreviation TTP refers to the conventional, deoxy-form of the thymidine 5'-triphosphate, the objection is withdrawn and applicants recitation of "TTP" is interpreted in this application based on applicants arguments as standing for the "deoxy-form of the thymidine 5'-triphosphate".

Applicants continue to traverse the rejection of claims 10, 14, 15, and 44 under 35 U.S.C. 102(e) as being anticipated by Riedl et al. (U.S. Patent No: 5,882,904, filed 8/4/1997). It is noted that applicants amendment to claim 10 will not be entered, and thus applicants arguments as they apply to this amendment are not considered. Applicants amendment as it applies to current claims 10, 14, 15, and 4 are considered persuasive on the basis that Riedl et al. do not teach a mutant in Region II of the taught polymerase, as required by claim 10.

Continuation of 5. does NOT place the application in condition for allowance because:

Applicants continue to traverse the rejection of claims 6-15 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention on the basis that the application consistently refers to the claimed Family B DNA polymerase from Thermococcus species JDF-3 with respect to SEQ ID NO: 2 and this therefore provides a literal boundary for what is meant by "Family B DNA polymerase from Thermococcus species JDF-3. This argument is not found persuasive and if it is applicants intent that "Family B DNA polymerase from Thermococcus species JDF-3" is equivalent to that DNA polymerase having the amino acid sequence of SEQ ID NO: 2, then it is suggested that applicants amend each of the rejected claims as such.

Applicants continue to traverse the rejection of claims 6-45, 85-87 under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention on the basis that applicants have provided a number of different individual mutants and a description of the structure/function relationship between "the conserved structural motifs" and Exo activity and particular amino acid changes. This argument is NOT found persuasive for the reasons of record. As previously pointed out the disclosed species are not representative of the infinite number of species within the claimed genus and the structure/function relationship discussed does not provide adequate guidance that helps in the description of the claimed genus. Applicants arguments as they apply to the proposed amendment of claim 10 are not relevant as the amendment will not be entered after final (See above) and thus the rejection and reasoning of record remains.

Applicants continue to traverse the rejection of claims 10, 14, 15, 16-45 and 85-88 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention on the basis that as above the phrase "non-conventional nucleotide" is clear. This rejection is withdrawn as it relates to the phrase "non-conventional nucleotide". However, the rejection of claims 10, 14, 15, 16-45 and 85-88 under 35 U.S.C. 112, second paragraph remains on the basis of the non-entry of applicants amendments of claim 10, as the rejection relates to the phrase "Region II" and as the rejection relates to claim 88.